



QUADRANT

TIVAR® CLEANSTAT™

Engineering Innovative Solutions for Bulk Material Handling

Product Profile:

- Electro Static Dissipative
- Meets FDA and USDA guidelines 3A-Dairy certification
- Reduces noise
- Self-lubricating
- Corrosion-resistant
- Meets ASTM D-4020-81 of 4.0- to 5.4-million molecular weight
- No moisture absorption

TIVAR® CleanStat™ can cut downtime and fines build-up in a variety of applications. It eliminates static build-up problems, meets FDA, USDA and 3A-Dairy guidelines for food contact and exhibits a longer wearing, lower coefficient of friction sliding surface than stainless steel.

TIVAR® CleanStat™ can be easily fabricated into components and replacement parts that reduce noise levels in plants and require less frequent cleaning. Its welded design capabilities result in seamless welded components.

TIVAR® CleanStat™ available in 48" x 120" sheets with gauge sizes ranging from 1/4" to 3". It is also available in specific tube and rod sizes and custom fabricated parts.



| Industries | Applications |
|--|---|
| FDA Industries (food packaging/ Bulk Material Handling processing) | Chute liners Fabricated components Hopper liners Vibratory feeder pans |

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Data Sheet No: 10525
Revision: 01
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| DATA SHEET | | | |
|---|----------------------------------|--------------------|------------------------|
| TIVAR® CLEANSTAT™ - FDA, USDA & 3-A Dairy, Electro Static Dissipative UHMW-PE | | | |
| Property | Units | Test Method | Typical Average Values |
| Mechanical | | | |
| Specific Gravity, 73° F | - | ASTM D792 | .94 |
| Tensile Strength, 73° F | psi | ASTM D638 | 5200 |
| Tensile Modulus of Elasticity, 73° F | psi | ASTM D638 | 108000 |
| Tensile Elongation (at break), 73° F | % | ASTM D638 | 200 |
| Flexural Strength, 73° F | psi | ASTM D790 | 3200 |
| Flexural Modulus of Elasticity, 73° F | psi | ASTM D790 | 110000 |
| Shear Strength, 73° F | psi | ASTM D732 | |
| Compressive Strength, 10% Deformation, 73° F | psi | ASTM D695 | 3100 |
| Compressive Modulus of Elasticity, 73° F | psi | ASTM D695 | 77750 |
| Hardness, Rockwell, Scale as noted, 73° F | - | ASTM D785 | N/A |
| Hardness, Durometer, Shore "D" Scale, 73° F | - | ASTM D2240 | 66 |
| Izod Impact (notched), 73° F | ft.lb./in. | ASTM D256 Type "A" | No Break |
| Coefficient of Friction (Dry vs. Steel) Dynamic | - | QTM 55007 | .12 |
| Limiting PV (with 4:1 safety factor applied) | ft.lbs.in. ² min. | QTM 55007 | 2000 |
| Sand Slurry Abrasion | 1018 Steel = 100. | ASTM D4020 | 13 |
| Thermal | | | |
| Coefficient of Linear Thermal Expansion (-40°F to 300°F) | in./in./°F | ASTM E-831 (TMA) | 1.1 X 10 ⁻⁴ |
| Heat Deflection Temperature 264 psi | °F | ASTM D648 | 116 |
| Tg-Glass Transition (amorphous) | °F | ASTM D3418 | N/A |
| Melting Point (crystalline) peak | °F | ASTM D3418 | 275 |
| Continuous Service Temperature in Air (Max.)(1) | °F | - | 180 |
| Thermal Conductivity | BTU in./(hr.ft. ² °F) | - | |

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| TIVAR® CLEANSTAT™ - FDA, USDA & 3-A Dairy, Electro Static Dissipative UHMW-PE | | | |
| Property | Units | Test Method | Typical Average Values |
| Electrical | | | |
| Dielectric Strength, Short Term | Volts/mil | ASTM D149 | N/A |
| Surface Resistivity | ohms/square | EOS/ESD S11.11 | 10 ⁷ - 10 ¹⁰ |
| Dielectric Constant, 10 ⁶ Hz | - | ASTM D150 | N/A/ |
| Dissipation Factor, 10 ⁶ Hz | - | ASTM D150 | N/A |
| Flammability @ 3.1 mm (1/8 in.) (3) | - | UL94 | HB |
| Miscellaneous | | | |
| Water Absorption Immersion, 24 Hours | % by wt. | ASTM D570(2) | < 0.01 |
| Water Absorption Immersion, Saturation | % by wt. | ASTM D570(2) | < 0.01 |

- (1) Data represent Quadrant's estimated maximum long-term service temperature based on practical field experience.
- (2) Specimens: 1/8" thick x 2" diameter or square.
- (3) **Estimated rating based on available data.** The UL 94 Test is a laboratory test and does not relate to actual fire hazard. Contact Quadrant for specific UL "Yellow Card" recognition number.

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